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Testing leather/collagen _ather test after DIN, EN/ISO, VDA a.o.

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Accredited Test Laboratory

Testing of leather, leatherboards, collagenous materials

Overview test lab / contact

Tests for single parameters:

A) physical-mechanical tests and investigations

Thickness

surface coating thickness

balk density

.

: :

7:

Tensile test (tesile force, elongation to break)

Tear test /resistance

Tearing load/ split tear force

stitch tear resistance

square tensil at tensometer (bulg test), burst

pressure

Finish adhesion

Resistance to flexing (flexometer test)

Color fastness of rubbing (dry, wet, sweat) Sweat fastness / resistance to transpiration

water resistance, Water permeability

(penetrometer)

Water absorption - testing

Water-vapour permeability

Light fastness tests

Pastriess to light

Shrinking behaviour, Climatic-shock resistance

Burning test / fire testing

Full drain (test for corrected grain)

Genuine leather (descriptor)

Microscopy, photography

DIN EN ISO 2589 (DIN 53326*), IUP 4

DIN EN ISO 17186

DIN EN ISO 2420 (DIN 53327*), IUP 5

DIN EN ISO 3376 (DIN 53328*), IUP 6

DIN EN 150 3377-1 (DIN 53329-A*), TUP 40

DIN EN ISO 3377-2, IUP B

DIN 53331

DIN 53323

DIN EN ISO 11644, IUF 470

DIN EN ISO 5402, DIN 53351(edition 1983-01),

JUP 20

DIN EN ISO 11640 (DIN 53339*), JUF 450

DIN EN ISO 11641, DIN EN ISO 105-E04

DIN EN ISO 5403 (DIN 53338*)

DIN EN 344-1, IUP TO-

DIN EN ISO2417 (DIN 53330*, Kubelka),

IUP 7, after Freundlich

DIN EN 14268 (DIN 53333*), IUP 15,

Herfeld-method

DIN EN ISO 105-802 (DIN 54004 *), IUF402

VDA 75202 (DJN 75202*), ISO 105-806, PV 1303

TL 52064, PV 1200, DBL 5310,

PTL 5002, BMW, PA-N 123 a.o.

DIN 75200/FMVSS 302, DIN EN 1021-1/-2, TL 1010,

DBL 5307, FMV99 302

FILK-QMA-1201

RAL 060 A2

Light microscopy, digital camera, SEM

B) Chemical-analytical tests and investigations

Water content - measurement / volatile

components

Áshes (total, water-insoluble)

Dichloromethane extract (fat content / grease

dontent)

pH value - determination

Water souble matter (Washouts)

Chromium oxide content

Chromium (VI) content

Ázo dyes

Pentachlorphenole (PCP)

DIN 53304, DIN EN 14676 (draft), IUC 5

DIN EN ISO 4047 (Norm DIN 53305*), IUC 7

DIN EN ISO 4048 (DIN 53306*), IUC 4

DIN EN ISO 4045 (DIN 53312*), IUC 11

DIN EN ISO 14657 (DIN 53307*), IUC 6

DIN 53309, IUC 8

DIN CEN/TS14495, DIN 53314, IUC 18

DIN ISO/TS 17234, DIN 53316, IUC 20

DIN CEN/TS14494, \$ 35 LMBG B 82.02-8

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22.12.2004

PAGE 53/54 * RCVD AT 1/21/2005 4:07:42 PM [Eastern Standard Time] * SVR:USPTO-EFXRF-1/0 * DNIS:8729306 * CSID:4128091054 * DURATION (mm-ss):13-46

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and there !

WISO/TE

Determination of formaldehyde content

Elatable heavy metals

Çdilagen content

*did standards

Detection of amide nitrogen

Emissionen, VOC, fagging, adour

Adalytic (elements, compounds)

(DIN 53313 *), IUC 25

DIN ISO/TS 17226, (DIN \$3315*), IUC 19

DIN EN ISO 105-E04 (DIN 54020)

FILK-QMA 2003 / Hydroxyprolin-method

DIN 53308, IUC 10

a. o. VDA 270, VDA 275, VDA 277, VDA 278, DIN EN

ISO 14288

a. o. EDX, XPS / ESCA Quant. element-contents,

FTIR, GC-MS

Tests in accordance with Technical Specifications ("Technische

Lieferbedingungen" - TL):

- Full testing AUDI/VW TL 52064, VW 50103, VW 50104, VW 50180

- run testing ADDJ vw 1c 3200-), vw 30103, vw 30104, vt Leather testing Opel TM 900400, TM 900600, TM 900700 - Dalmier-Chrysler DBL 5306, DBL 5310 - BMW 8171 302.6, QV \$1033 u.a. - Porsche PTL 5202, PN 780

- Leather testing to the German Federal Armed Forces' guidelines TL 8330,

among them i. a.:

Shoe upper and lining leather (TL 8330-0001)

Sleek and harness leather (TL 8330-0003)

Glove leather (TL 8330-0006), garment leather (TL 8330-0007) Chrome split leather (TL 8330-0009), water-proof leather (TL 8330-0010) Latchet leather, edging leather (TL 8330-0016), counters (TL 8330-0018)

Harmful matters (TL 8330-0013-A)

More tests and prices on request

Overview rest lab / contact

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